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REMARKS

Regarding the status of the present application, Claims 2-4, 7, 14-16 and 19 have been amended, Claims 11-13 have been canceled, and Claims 1-10 and 14-20 are pending in this application. Reconsideration of this application is respectfully requested. It is respectfully submitted that the present amendment does not require further searching on the part of the Examiner. It is also respectfully submitted that the present amendment places this application in condition for allowance

It is respectfully submitted that the issuance of the final rejection was not warranted. The claim amendments made in the previous response did not necessitate any new ground(s) of rejection presented in the current Office action. Only minor claim amendments were made, adding a recitation of "dynamic network" to the body of Claim 1, which is also stated in the preamble, and which would have been searched by the Examiner in his first search. These claim amendments clearly did not necessitate a new search. Furthermore, the previously cited Chin et al. patent was cited by the Examiner as disclosing a dynamic network, and stated "Chin teaches a communication method for use in a dynamic network..."

It is also respectfully submitted that the Examiner's previous search involved classes 370, 714 and 709. The newly cited references are in classes 370, 709 and 705. It is respectfully submitted that the Examiner should have uncovered the Krishnamurthy et al. reference in the previous search, and that searching for this reference was not based upon any claim amendments made in the previous response. Application is being improperly penalized due to the fact that the Examiner did not find the in the prior search.

Therefore, it is respectfully submitted that no Claim amendment made by Applications' necessitated the new grounds of rejection cited in the present Office Action. Accordingly, withdrawal of the final rejection is respectfully requested.

Claims 2-9, 11-13 and 16-20 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claim 2 has been amended to address the Examiner's issue and is believed to be clearly supported by the specification as filed. The Examiner made arguments regarding Claim 16. However, previously submitted Claim 14 recited notifying steps, not Claim 16. Claim 14 has been amended to address the Examiner's issue and is believed to be clearly supported by the specification as filed. As for Claims 11-13, they have been canceled and therefore the rejection thereof is considered moot.

In view of the amendments made to Claims 2 and 14, and cancellation of Claims 11-13, it is respectfully submitted that Claims 2-9, and 16-20 comply with the written description requirement. Withdrawal of the Examiner's rejection is respectfully requested.

Claims 3-9 and 15-20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. The Examiner pointed out antecedent basis issues in Claims 3 and 15. Claims 3 and 15 have been amended to correct the antecedent basis issues. It is respectfully submitted that Claims 3 and 15 are clear and definite.

The Examiner's rejection of Claims 4 and 16 is not entirely understood. However, Claims 4 and 16 have been amended to delete the questionable language noted by the Examiner. It is respectfully submitted that Claims 4 and 16 are clear and definite.

Claims 7 and 19 have been amended to address the Examiner's issues. It is respectfully submitted that Claims 7 and 19 are clear and definite.

In view of the amendments, it is respectfully submitted that Claims 3-9 and 15-20 are clear and definite. Withdrawal of the Examiner's rejection of Claims 3-9 and 15-20 is respectfully requested.

Claims 1-3, 10, 14 and 15 were rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent No. 6,910,024 issued to Krishnamurthy et al.

The Krishnamurthy et al. patent discloses "pricing-based quality of service (PQoS) control in networks" as is indicated by its title. The Krishnamurthy et al. patent discloses that the network may be "a computer network having dynamically allocated network resources."

The Examiner has argued that The Krishnamurthy et al. patent discloses allocating network resources of a dynamic network to a data stream based upon precedence levels of other data streams desiring the same resources or already utilizing the same resources, citing column 2, lines 23-28 and lines 43-48. It is respectfully submitted that the Examiner's rejection is in error.

Column 2, lines 23-28 states that "The data packets are delivered from user to user the nodes that make up the network. In one embodiment the network is a computer network having dynamically allocated network resources. These resources include data transmission bandwidth and processor capacity." Column 2, lines 43-48 state that "Additionally, the network resources are monitored and are configured to provide a plurality of predictable and dynamically variable quality of service levels, with each quality of service level guaranteeing a particular combination of network resources and including a price of service."

It is respectfully submitted that the Krishnamurthy et al. patent does not disclose or suggest anything regarding allocating network resources of a dynamic network to a data stream based upon precedence levels. The terms "precedence" and "precedence levels" are not used in the Krishnamurthy et al. patent. The Krishnamurthy et al. patent teaches that "the network resources are monitored and are configured to provide a plurality of predictable and dynamically variable quality of service levels, with each quality of service level guaranteeing a particular combination of network resources and including a price of service." It is respectfully submitted that "quality of service levels ... guaranteeing a particular combination of network resources and including a price of service" is not the same as "allocating network resources of a dynamic

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network to a data stream based upon precedence levels of other data streams desiring the same resources or already utilizing the same resources" as is recited in Claim 1.

It is respectfully submitted that allocating network resources to deliver particular quality of service levels is not the same as allocating network resources of a dynamic network to a data stream based upon precedence levels of other data streams desiring the same resources or already utilizing the same resources. In fact, allocating network resources to deliver a particular quality of service level has nothing to do with allocating network resources of a dynamic network to a data stream based upon precedence levels of other data streams desiring the same resources or already utilizing the same resources. Quality of service level resource allocation is not based upon the precedence levels of other of other data streams desiring the same resources, and the precedence levels of other of other data streams is generally irrelevant to quality of service levels.

Therefore, with regard to Claim 1, it is respectfully submitted that the Krishnamurthy et al. patent does not disclose or suggest "allocating network resources of a dynamic network to a data stream based upon precedence levels of other data streams desiring the same resources or already utilizing the same resources" as is recited therein. Withdrawal of the Examiner's rejection and allowance of Claim 1 are respectfully requested.

With regard to Claim 2, it is respectfully submitted that the Krishnamurthy et al. patent does not disclose or suggest "finding routes from a source to a destination that can be supported at a given precedence level." The Examiner asserted that column 2, lines 15-55 discloses this. This general allegation by the Examiner that the first Summary of the invention paragraph discloses "finding routes from a source to a destination that can be supported at a given precedence level" is not supported by the cited paragraph. Again, the terms "precedence" and "precedence levels" are not used in the Krishnamurthy et al. patent. The Examiner has not pointed out specific language that specifically discloses what is recited in Claim 2.

Therefore, it is respectfully submitted that the Krishnamurthy et al. patent does not disclose or suggest the aspects recited in Claim 2. Claim 2 is also considered patentable based upon its dependence from allowable Claim 1. Withdrawal of the Examiner's rejection and allowance of Claim 2 are respectfully requested.

With regard to Claim 3, it is respectfully submitted that the Krishnamurthy et al. patent does not disclose or suggest "nodes track control signaling in a routing database and use this retained information to either facilitate a route request or to ensure that low precedence control is not forwarded into portions of the network known to require higher precedence."

The Examiner asserted that column 5, lines 13-29 discloses this. Column 5, lines 13-29 discloses that:

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This basic architecture allows users to make data flow reservations while keeping the core network routers relatively unencumbered. Issues related to policing traffic and collecting data flow information are handled at edge elements. Quality of service differentiation is realized by marking data packets of different data flows differently in accordance with the amount of resources allocated for those data flows. An important aspect of the present invention is that only temporary data flow state information is stored at the network's core routers during QoS reservation setup, QoS reservation tear-down operations, and per-hop acknowledgements of reservation setup and tear-down operations between the core routers. End systems collect information describing the reserved quality of service, the participating end systems, and the path taken by the reservation session. By periodically updating this information, the end nodes can detect path changes or path node failures.

It is respectfully submitted that this portion of the Krishnamurthy et al. patent does not address tracking of control signaling by nodes in a database, or that this database information is used to either facilitate a route request or to ensure that low precedence control is not forwarded into portions of the network known to require higher precedence. There is no database disclosed or suggested in the Krishnamurthy et al. patent, or use of stored database information to achieve the aspects recited in Claim 3.

Therefore, it is respectfully submitted that the Krishnamurthy et al. patent does not disclose or suggest the aspects recited in Claim 3. Claim 3 is also considered patentable based upon its dependence from allowable Claim 1. Withdrawal of the Examiner's rejection and allowance of Claim 3 are respectfully requested.

With regard to Claim 10, it is respectfully submitted that it is patentable based upon its dependence from allowable Claim 1. Withdrawal of the Examiner's rejection and allowance of Claim 10 are respectfully requested.

With regard to Claim 14, it is respectfully submitted that the Krishnamurthy et al. patent does not disclose or suggest anything regarding "allocating network resources to a data stream based upon precedence levels of other data streams desiring the same resources or already utilizing the same resources" and "finding routes from a source to a destination that can be supported at a given precedence level" as is recited therein. The above arguments regarding Claim 1 address the fact that the Krishnamurthy et al. patent does not disclose or suggest allocating network resources to a data stream based upon precedence levels of other data streams. Withdrawal of the Examiner's rejection and allowance of Claim 14 are respectfully requested.

With regard to Claim 15, it is respectfully submitted that the Krishnamurthy et al. patent does not disclose or suggest that "nodes track control signaling in a routing database and use this retained information to either facilitate a route request or to ensure that low precedence control is not forwarded into portions of the network known to require higher precedence" as is recited therein. The above arguments address the fact that the Krishnamurthy et al. patent does not disclose or suggest allocating network resources to a data stream based upon precedence

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levels of other data streams. Claim 15 is also considered patentable based upon its dependence from allowable Claim 14. Withdrawal of the Examiner's rejection and allowance of Claim 15 are respectfully requested.

Claims 4-9 and 16-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,910,024 issued to Krishnamurthy et al. in view of US Patent No. 6,895,441 issued to Shabtay et al. The Examiner admitted that the Krishnamurthy et al. patent "fails to teach establishing a secondary route for data flow from the first node to the second node using resources available at that precedence or lower; upon the occurrence of a failure of the primary route, switching the data flow from the primary route to the secondary route; establishing a new secondary route for data flow from the first node to the second node using signaling directed only to resources known to not be restricted to higher precedence levels; repeating the above steps again and again as intra-node links of the network are established and broken." Notwithstanding this admission, the Examiner cited the Shabtay et al. as disclosing that "upon the failure of the primary route, switch over the data flow to backup route and repeating the switching over to establish the failure" citing Fig. 8, and column 3, lines 53-64, and that it would be obvious to combine the teachings of the two cited references.

In order to combine the teachings of the two references, there must be some teaching or suggestion contained in the cited references that addresses their combination. The fact that the Examiner acknowledges that the Krishnamurthy et al. patent fails to disclose multiple aspects recited in Claims 4-9 and 16-20 is a clear admission that there is no teaching contained in this patent that would motivate one to combine the teachings of the Shabtay et al. patent with the teachings of the Krishnamurthy et al. patent, absent using hindsight reconstruction.

Furthermore, the Examiner's assertion that a statement in the Shabtay et al. patent to the effect that "upon the failure of the primary route, switch over the data flow to backup route and repeating the switching over to establish the failure" is a disclosure of all of the aspects recited in Claims 4-9 and 16-20 is clearly unsupported by the teachings of the Shabtay et al. patent. The Examiner cannot point out specific language in the Shabtay et al. patent that addresses each of the specific detailed aspects of the present invention recited in Claims 4-9 and 16-20.


Therefore, it is respectfully submitted that the Krishnamurthy et al. and Shabtay et al. patents, taken singly or together, do not disclose or suggest the inventions recited in Claims 4-9 and 16-20, and certainly not without the use of hindsight reconstruction. Claims 4-9 and 16-20 are also considered patentable based upon their dependence from allowable Claims 1 and 14, respectively. Withdrawal of the Examiner's rejection and allowance of Claims 4-9 and 16-20 are respectfully requested.

The prior art heretofore made of record and not relied upon is considered pertinent to disclosure to the extent indicated by the Examiner.

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In view of the above, it is respectfully submitted that all presently pending Claims are not anticipated by, nor are they obvious in view of, the Krishnamurthy et al. patent, and are therefore patentable. Accordingly, it is respectfully submitted that the present application is in condition for allowance. Reconsideration of this application and allowance thereof are earnestly solicited. It is again respectfully submitted that the present amendment does not require further searching on the part of the Examiner. It is also respectfully submitted that the present amendment places this application in condition for allowance, or in any event, places it in better condition for consideration on appeal.

Respectfully submitted,



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